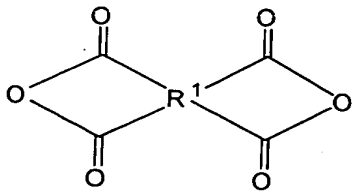
WHAT IS CLAIMED IS:

1. A method of forming a cavity between multilayered wirings, which comprises

a step of coating the surface of a first dielectric film formed on a semiconductor substrate with a polyamic acid and/or a polyimide obtained from at least one alicyclic tetracarboxylic acid dianhydride represented by the following general formula (1) and at least one alicyclic diamine represented by the following general formula (2):

General formula (1)



wherein R^1 represents a tetravalent alicyclic hydrocarbon group having 4-20 carbon atoms, the tetravalent alicyclic hydrocarbon group being able to contain a cyclic ether structure in the molecule, and

General formula (2)

$H_2N\text{-}R^2\text{-}NH_2$

wherein R^2 represents a divalent alicyclic hydrocarbon group having 4-20 carbon atoms,

a step of patterning the polyamic acid and/or the polyimide as a cavity-forming polymer,

a step of forming a second dielectric film on the cavity-forming polymer containing a metallic wiring, and

a step of removing the cavity-forming polymer between the multilayered wirings by heating to form a cavity between the metallic wirings.

2. The method as claimed in claim 1, wherein the polyamic acid and/or the polyimide has a weight average molecular weight, as reduced into polystyrene, in the range of 1,000-500,000.

3. The method as claimed in claim 1, wherein the polyamic acid and/or the polyimide has a weight loss on heating at 350°C for one hour in an inert gas atmosphere and/or a vacuum atmosphere of 5% by weight or less and a weight loss on heating at 500°C for one hour in an inert gas atmosphere and/or a vacuum atmosphere of 80% by weight or more.

4. The method as claimed in claim 1, wherein the polyamic acid and/or the polyimide has a glass transition temperature of 200°C or higher.

5. The method as claimed in claim 1, wherein the polyamic acid and/or the polyimide has an elastic modulus at 25°C of 5 GPa or more.